

Art Unit: 2632

CLMPTO

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1. A golf range system comprising:

5 a target, said target having a top surface and at least one golf ball receiver,
said golf ball receiver configured to have a first opening at said top surface of said
target and a second opening, said target further comprising a target
reader/transmitter, said target reader/transmitter further comprising an entry
portion, a guide portion, an exit portion, and where said second opening of said
10 golf ball receiver is configured to allow operable connection to said entry portion,
a first RFID reader configured such that a golf ball, upon entering said entry
portion, will follow said guide portion past said first RFID reader in a readable
manner and then exit via said exit portion, a GPS receiver operably connected to
said reader/transmitter such that data from said GPS receiver is transmittable to a
15 server, and where said target reader/transmitter is operable for communication
with at least one server, said target being movable;

 a second RFID reader configured to read golf ball RFID tags and extract
golf ball IDs thereby and further configured to be in operable communications
with at least one server;

20 a server operable for communication with said at least one target
reader/transmitter and said second RFID reader and configured to make at least

one calculation regarding golf ball and player data using data received by said server from at least one of: said target reader/transmitter; or, said second RFID reader, said server further comprising a database;

said database configured to retrievably hold golf ball IDs in associated with
5 one of: other golf ball IDs; or, at least one player ID, and further configured to hold data sent by said target reader/transmitter and said second RFID reader, and store said calculated golf ball and player data, in a manner retrievable by one of: a player ID; or, a golf ball ID.

10 2. The golf range system of claim 1 where said first RFID reader is configured such that its antenna coils are wrapped in a tubular manner around said central guide.

3. The golf ball range system of claim 1 where said second RFID reader is
15 configured such that its antenna coils are wrapped in a tubular manner around a guide, said guide configured to enable a golf ball to pass through said tubular antenna coils.

4. The golf range system of claim 1 further comprising a sensor located near at
20 least one tee-off area, said sensor configured to detect a golf ball that is one of: placed on the tee-off area; hit from the tee-off area; or, both placed on, and hit

from, the tee-off area; and is further configured to transmit data about said detected golf ball to a server.

5. The golf range system of claim 1 further comprising a plurality of servers,
5 where said plurality of servers are in operable communication with each other, and where one of said plurality of servers further comprises a database, said database configured for player accounts, and further configured to hold one of: golf target data, golf ball ID data, detected golf ball data; or, golf target data and golf ball ID data and detected golf ball data in a manner associated with a player account
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6. The golf range system of claim 1 further comprising a plurality of servers, where said plurality of servers are in operable communication with each other, and where one of said plurality of servers further comprises a database, said database configured for storing data in a manner retrievable using golf ball IDs, and further
15 configured to hold one of: golf target data, a plurality of golf ball IDs, detected golf ball data; or, golf target data and golf ball ID data and detected golf ball data in a manner associated with a golf ball ID.

7. The golf range system of claim 1 where said at least one server is also
20 configured to be a WWW server, enabled to allow logged in users to retrieve one of: personal golf game data; a plurality of player's of golf game data; or, both

personal and a plurality of player's golf game data.

8. A method of using a golf range system, the golf range system having a moveable target, the target having at least one golf ball receiver and at least one RFID and GPS reader/transmitter in communication with at least one server, the method comprising:

- entering a golf range;

- providing a set of golf balls having RFIDs therein, where said set of golf balls comprises one or more golf balls;

- using a range entry golf ball RFID reader to provide a set of golf ball IDs corresponding to said set of golf balls in a one-to-one manner;

- storing said set of golf ball IDs on a database on said server;

- associating said set of golf ball IDs with an account on said database;

- hitting said golf balls from a tee-off area towards at least one target;

- gathering data on any hits on any target;

- sending said data to a server;

- providing a person having access to said account data about said golf ball hits and any other data collected pursuant to using said set of golf balls.

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9. The method of claim 8 where said providing a set of golf balls is a set of golf

purchased for play by a player at a range cashier's station.

10. The method of claim 8 where said providing a set of golf balls is a set of golf balls owned by a player, and brought to the range by said player.

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11. The method of claim 8 where said associating said set of golf ball IDs with an account further comprises associating said set of golf ball IDs with a specific player account.

10 12. The method of claim 8 where said associating said set of golf ball IDs with an account further comprises associating said set of golf ball IDs with an anonymous player account.

13. The method of claim 8 where said associating said set of golf ball IDs with an
15 account further comprises associating said set of golf ball IDs into a group, said group being accessible using any one of the golf ball IDs contained in the group.

14. The method of claim 8 where said gathering data on any hits on any target further comprises:

20 providing a plurality of targets;

recording data on any ball from said set of balls that reaches any target;

- sending said gathered data to a server;
- gathering all sent data in said database;
- providing said data to any authorized user, player, or program running on said server.

15. A method of charging players using a golf range system, the golf range system having a moveable target, the target having at least one golf ball receiver and at least one RFID and GPS reader/transmitter in communication with at least one server, the method comprising:

- reading a set of gold balls at a range entry golf ball RFID reader;
- associating a player with said read set of golf balls;
- allowing said player to go to a tee-off area;
- recording in a database output from said sensor each time a golf ball is placed in said tee-off area;
- totaling the number of golf balls said player places in said tee-off area in a periodic manner; and,
- billing said player based on the number of golf balls that have been placed on the tee-off area.

16. The method of claim 15 where said associating a player with said read set
5 of golf balls further comprises associating a player account with said read set of
golf balls, and where said billing said player further comprises a periodic bill
sent to said player if there is more than 0 totaled golf balls placed in a tee-off
area by said player.

17. The method of claim 15 where said associating a player with said read set
10 of golf balls further comprises associating an anonymous player account with
said read set of golf balls, and where said billing said player further comprises
presented said player with a bill based on the number of golf balls placed in the
tee-off area before said player leaves the range.